# MINISTRY OF HEALTH OF UKRAINE ODESA NATIONAL MEDICAL UNIVERSITY

Department of Obstetrics and Gynaecology

APPROVED

Vice-rector for scientific and pedagogical work

Eduard BURIACHKIVSKYI

September 1st, 2025

# WORKING PROGRAM IN THE DISCIPLINE "OBSTETRICS AND GYNAECOLOGY"

Level of higher education: second (master's degree)

Field of knowledge: 22 «Health care»

Specialty: 222 «Medicine»

Educational and professional program: Medicine

The work program is composed on the basis of the educational and professional program "Medicine" for the training of specialists of the second (master's) level of higher education on the specialty 222 "Medicine" of the field of knowledge 22 "Health care", approved by the Academic Council of ONMedU from 27.06.2024 (protocol No 10).

The work program is composed by Head of the Department, Professor, MD Gladchuk I.Z. Professor, MD Volyanska A.G. Professor, MD Marichereda V.G. Associate Professor, Ph.D. Lavrynenko G.L. Associate Professor, Ph.D. Pavlovska O.M. Assistant Professor, Ph.D. Bykova N.A. Assistant Professor, Ph.D. Shevchenko O.I. The work program was discussed at the meeting of the Department of Obstetrics and Gynaecology, 27.08.2025, protocol №1 Head of the Department Ihor GLADCHUK Approved by the guarantor of the educational and professional program\_\_\_\_\_ Valeriia MARICHEREDA Approved by the subject-cycle methodological commission on surgical disciplines of ONMedU Protocol № 1 dated 28.08.2025 Head of the subject-cycle methodological commission on surgical disciplines of ONMedU\_ Vasyl MISHCHENKO Revised and approved at the meeting of the Department of Obstetrics and Gynaecology Protocol № dated / /20 . Head of the Department Ihor GLADCHUK Revised and approved at the meeting of the Department of Obstetrics and Gynaecology Protocol № \_\_\_\_\_ dated \_\_/\_\_/20\_\_. Head of the Department \_\_\_\_\_ Ihor GLADCHUK

# 1. DESCRIPTION OF THE DISCIPLINE:

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the discipline		
	4th course			
Total number:	Field of knowledge	Full-time (day) education		
G 11 CECTG 2.0	22 «Health care»	Compulsory discipline		
Credits of ECTS: 3.0	C 14	Course: 4		
Hours: 90	Specialty 222 «Medicine»	Semesters VII - VIII		
110uis. 90	222 «Medicine»	Lectures (6 hours)		
Content modules: 0	Level of higher education	Seminars (0 hours)		
	second (master's degree)	Practical classes (54 hours)		
	( 5 /	Laboratory classes (0 hours)		
		Independent work (30 hours)		
		including individual tasks (0 hours)		
		Form of final control – Differentiated		
		Testing		
	5th course			
Total number:	Field of knowledge	Full-time (day) education		
	22 «Health care»	Compulsory discipline		
Credits of ECTS: 4.0	g	Course: 5		
II 120	Specialty 222 Madiaina	Semesters IX - X		
Hours: 120	222 «Medicine»	Lectures (12 hours)		
Content	Level of higher education	Seminars (0 hours)		
modules: 0	second (master's degree)	Practical classes (68 hours)		
		Laboratory classes (0 hours)		
		Independent work (40 hours)		
		including individual tasks (0 hours)		
		Form of final control – Differentiated		
		Testing		
	6th course			
Total number:	Field of knowledge	Full-time (day) education		
G 11. 050000 6.0	22 «Health care»	Compulsory discipline		
Credits of ECTS: 3.0	C : -14	Course: 6		
Hours: 90	Specialty 222 «Medicine»	Semesters XI - XII		
110015. 70	222 Wricultine"	Lectures (0 hours)		
Content	Level of higher education	Seminars (0 hours)		
modules: 0	second (master's degree)	Practical classes (60 hours)		
		Laboratory classes (0 hours)		
		Independent work (30 hours)		
		including individual tasks (0 hours)		
		Form of final control – Exam		

# 2. THE PURPOSE AND TASKS OF THE DISCIPLINE, COMPETENCIES, PROGRAM LEARNING RESULTS.

**The purpose:** Mastering by the student of knowledge and formation of elements of professional competencies in the field of "Obstetrics and Gynaecology", improving the skills and competencies acquired in the study of previous disciplines.

#### Task:

- 1. Formation of skills and abilities in differential diagnosis, the most common diseases in gynecological patients and pregnant women.
- 2. Improving the skills of substantiating a clinical diagnosis, drawing up a plan for laboratory and instrumental research in gynecological diseases and during pregnancy.
- 3. Mastering the ability to determine the tactics of treatment and prevention of gynecological diseases and complications of pregnancy.

The process of studying the discipline is aimed at forming elements of the following competencies:

**Integral competence:** The ability to solve typical and complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.

# **General competencies (GC):**

- GC1. Ability to abstract thinking, analysis and synthesis
- GC2. Ability to learn and master modern knowledge
- GC3. Ability to apply knowledge in practical situations
- GC4. Knowledge and understanding of the subject area and understanding of professional activity
- GC5. Ability to adapt and act in a new situation
- GC6. Ability to make reasonable decisions
- GC7. Ability to work in a team
- GC8. Ability to interpersonal interaction
- GC11. Ability to search, process and analyze information from various sources
- GC12. Determination and persistence in relation to assigned tasks and assumed responsibilities
- GC16. Ability to evaluate and ensure the quality of the work performed.

# Special (professional, subject) competencies (SC):

- SC1. Ability to collect medical information about the patient and analyze clinical data
- SC2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results
- SC3. Ability to establish a preliminary and clinical diagnosis of the disease
- SC4. Ability to determine the necessary regime of work and rest in the treatment and prevention of diseases
- SC5. Ability to determine the nature of nutrition in the treatment and prevention of diseases
- SC6. Ability to determine the principles and nature of treatment and prevention of diseases
- SC7. Ability to diagnose emergency conditions
- SC8. Ability to determine tactics and provide emergency medical care
- SC10. Ability to perform medical manipulations
- SC12. Ability to determine the tactics of physiological pregnancy, physiological childbirth and the postpartum period. Family planning counselling skills and contraceptive method selection
- SC16. Ability to fill medical documentation, including electronic forms
- SC26. Ability to determine the management tactics of persons subject to dispensary supervision

### **Program learning outcomes (PLO):**

- PLO1 Having a thorough knowledge of the structure of professional activity. Being able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.
- PLO2 Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.

- PLO3 Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problem, including an early intervention system.
- PLO4 Identifying leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
- PLO5 Collecting complaints, history of life and diseases, assessing the psychomotor and physical development of the patient, the state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluation of the information regarding the diagnosis (according to list 4), taking into account the age of the patient.
- PLO6 Establishing the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis, observing the relevant ethical and legal norms, under the control of the managing physician in the conditions of the health care institution (according to the list 2).
- PLO7 Assigning and analyzing additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
- PLO8 Determination of the main clinical syndrome or symptom that determines the severity of the victim's/victim's condition (according to list 3) by making a reasoned decision about the person's condition under any circumstances (in the conditions of a health care facility, outside its borders), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.
- PLO9 Determination of the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the patient's age, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, based on a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to justify personalized recommendations under the control of the head physician in the conditions of a medical institution.
- PLO10 Determination of the necessary mode of work, rest and nutrition based on the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- PLO11 Determination of the approach, plan and tactics of managing physiological pregnancy, physiological childbirth and the postpartum period by making a reasoned decision according to existing algorithms and standard schemes.
- PLO12 Assessment of the general condition of a newborn child by making a reasoned decision according to existing algorithms and standard schemes, observing the relevant ethical and legal norms.
- PLO14 Determination of tactics and providing emergency medical care in emergencies (according to list 3) in limited time conditions according to existing clinical protocols and standards of treatment.
- PLO17 Performing medical manipulations (according to list 5) in the conditions of a medical institution, at home or work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.
- PLO18 Determination of the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course,

peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population based on regulatory documents.

- PLO21 Searching for the necessary information in the professional literature and databases of other sources, analyzing, evaluating and application of this information.
- PLO24 Organization of the necessary level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.
- PLO30 Determination of the management tactics of persons subject to dispensary supervision (children, pregnant women, workers whose professions require mandatory dispensary examination).
- PLO31 Determination of the management tactics of persons suffering from chronic infectious diseases subject to dispensary supervision.
- PLO33 To be able to provide counseling on issues of family planning and selection of a contraceptive method.

# As a result of studying the discipline, the student must:

#### Know:

- Basic principles of organizing obstetric and gynecological care for the population of Ukraine.
- Possible complications of pregnancy, childbirth and the postpartum period.
- Management of patients with different obstetric pathology.
- Etiopathogenesis, classification, diagnosis of diseases of the female reproductive system
- Management of patients with different gynecological pathology
- Methods of contraception for certain categories of the population; WHO medical acceptance criteria for the use of contraception

#### Be able:

- Collect data on patient complaints, medical history, life history.
- To evaluate information about the diagnosis using a standard procedure, based on the results of laboratory and instrumental studies
- To determine the list of necessary clinical laboratory and instrumental studies and evaluate their results (list 4).
- To describe the leading clinical symptom or syndrome (list 1).
- To establish a preliminary diagnosis, carry out differential diagnosis and determine the clinical diagnosis of the disease (list 2).
- To determine the principles of treatment of diseases, the necessary regime of work and rest, the nature of nutrition (list 2).
- To diagnose emergency conditions (list 3).
- To determine tactics and provide emergency medical aid in emergency situations (list 3).
- To conduct counseling on family planning, to determine the tactics of physiological pregnancy, physiological childbirth, and the postpartum period.
- To assess a patient's condition; carry out diagnostic and tactical measures in each period of childbirth; to perform necessary examinations during vaginal delivery; assess the condition of the fetus during childbirth and mother's condition in postpartum period.
- To assess a patient's condition and recommend necessary examinations before using the contraceptive; demonstrate the ability to provide family planning counseling.
- Reasonably formulate and convey to the woman in labor, relatives and specialists recommendations for the most effective delivery; provide the necessary information about changes in a woman's body in the postpartum period.
- Reasonably formulate and demonstrate to the patient, relatives and specialists recommendations regarding the choice of contraception method; provide the necessary information about changes in a woman's body during the use of a contraceptive.

### Master the skills:

- Communication and clinical examination of the patient.
- Perform medical manipulations (list 5).
- Keep medical documentation.

# 3. CONTENT OF THE DISCIPLINE 4<sup>th</sup> course

- Topic 1. Organization of obstetric and gynaecological care in Ukraine. The contribution of family doctor in providing obstetric and gynaecological care. Organization of obstetric and gynaecological care. Organization of family planning services: structure, tasks. The contribution of a family doctor in the prevention of perinatal diseases and mortality.
- Topic 2. Clinical anatomy and physiology of the female reproductive organs. Methods of examination of gynaecologic patients. General symptomology in Gynaecology. Clinical anatomy of the female reproductive organs. Physiological changes in female reproductive organs at different age intervals. Neuroendocrine regulation of the female reproductive system. History taking in Gynaecology. The basic methods of examination in Gynaecology: external visual exam, speculum examination, bimanual pelvic examination. Additional gynaecological examination methods. Methods for evaluation of ovarian function. Methods in medical imaging (MRI, CT, MSG). Ultrasound methods in Gynaecology. Instrumental methods (uterine sounding, dilation and uterine curettage, biopsy, culdocentesis. Endoscopic methods (colposcopy, hysteroscopy, laparoscopy). Laboratory tests (bacterioscopic test of the female genital tract microflora, bacteriological test of the female genital tract microflora, Pap smear, ELISA, PCR).

General gynecological signs and symptoms (pain, vaginal discharge, menstrual disorders, abnormal uterine bleeding, infertility, sexual disorders, dysfunction of the adjacent organs).

- **Topic 3. Neuroendocrine regulation. Dysfunction of the female reproductive system.** Classification of the female reproductive system disorders. Amenorrhea: classification, diagnosis. Abnormal uterine bleeding. Clinical features, modern diagnostic methods and principles of treatment. Dysmenorrhea. Congenital malformations of the female reproductive organs.
- **Topic 4. Neuroendocrine syndromes in Gynaecology.** Neuroendocrine syndromes in Gynaecology: premenstrual syndrome, menopausal syndrome, polycystic ovary syndrome, Sheehan syndrome, hyperandrogenism, hyperprolactinemia. Clinical features, modern diagnostic methods and management.
- **Topic 5. Benign tumours of the female reproductive organs. Endometriosis. Breast formation.** The concept of ovarian cysts and tumours. Bartholin's cyst. Benign ovarian tumours: epithelial tumours, sex cord-stromal tumours, lipid cell tumors, germ cell tumors. Ovarian tumour-like formations. Benign tumours of the uterus. Clinical features, diagnosis and management of complications, prevention.

Endometriosis. Etiology and pathogenesis. Classification. Diagnosis. Clinical features. Modern management. Benign mammary dysplasia. Breast tumours (breast cysts, fibrocystic breast disease).

- **Topic 6. Precancerous diseases of the female reproductive organs.** Precancerous diseases of the female external genitalia. Precancerous conditions of the cervix: classification. Endometrial hyperplasia: aetiology, pathogenesis, classification, modern diagnostic methods, modern management. Prevention of precancerous diseases of the female reproductive organs.
- **Topic 7. Inflammatory diseases of the female reproductive organs.** The concept of vaginal microbiocenosis. Abnormal vaginal discharge. Aetiology, pathogenesis, classification of inflammatory diseases of the female reproductive organs. Non-sexually transmitted infections (vulvitis, bartolinitis, vaginitis, endocervicitis, endometritis, adnexitis, parametritis, pelviperitonitis). Diagnosis, treatment and prophylaxis of bacterial vaginosis. Sexually transmitted infections. Tuberculosis of the female reproductive organs.

Sexually transmitted diseases (trichomoniasis, gonorrhea, candidiasis, viral infections, ureaplasmosis, mycoplasmosis, chlamydia). Management of acute and chronic inflammatory diseases. Indications for surgical treatment.

Rehabilitation of the reproductive function in women who have had inflammatory diseases.

**Topic 8. "Acute abdomen" in gynaecological practice.** Ectopic pregnancy, ovarian apoplexy. Clinical features, diagnosis, management. Emergency aid. Preoperative and postoperative management in Gynaecology. Rehabilitation after gynaecological surgery.

**Topic 9. Infertility in couples.** Causes of the female and male infertility. Examination of married couples with infertility. Modern management of the female infertility (hormonal, surgical, advanced reproductive technologies).

**Topic 10. Family planning/contraception methods.** Family planning counselling: directions, benefits, counselling process. Methods of contraception: COC pills, vaginal ring, contraceptive patches, progestin-only pills, injection, IUDs, barrier methods and spermicides. Fertility awareness methods, voluntary surgical contraception, emergency contraception. Physical examination before initiating contraception. The medical eligibility criteria for contraceptive use.

Family planning for patients with HIV.

5<sup>th</sup> course

## Topic 11. Maternal pelvis. Foetus as an object of labour.

Pelvis from anatomical and obstetric points of view. Pelvic floor. Anatomy of the foetal skull. Foetal head diameters. Foetal measurements. Signs of foetal maturity. Measurement and evaluation of the female pelvis.

# Topic 12. Physiology of pregnancy. Methods of examination of pregnant women. Perinatal care.

Fertilization and development of a fertilized egg. Placenta, its structure and function. Critical periods of embryo and fetal development. Influence of harmful factors on the embryo and fetus. Physiological changes in a woman's body during pregnancy. Hygiene and nutrition of a pregnant woman. Methods of examination of pregnant women, symptoms of pregnancy. Fetal orientation in the uterus. Management of physiological pregnancy. Gravidogram. Laboratory diagnosis of HIV infection. Counseling for HIV. The concept of counseling and its ethical principles. Counseling skills. Determination of maternity leave period and calculation of the due date.

## Topic 13. Physiology of labour. Labour analgesia.

Preliminary period. Diagnosis of labour, labour onset. Bishop's scale. Mechanism of labour in OA and OP position. Physiology of labour. Management of labour. The partogram. Procedures for newborns soon after birth. Apgar score. Labour analgesia methods: non-pharmacological and pharmacological.

# Topic 14. Physiology of the postpartum period. Physiology of the neonatal period.

Physical changes after delivery (uterus, breasts, hormones and etc). Postpartum care. Physiology of lactation. Breastfeeding. Postpartum contraception: lactation amenorrhea method (LMA).

General anatomical and physiological considerations in the newborn. Care of the normal newborn. Benefits of the keeping mothers and babies together after delivery (as continuous rooming-in).

## Topic 15. Anomalies in the development of the fertilized ovum. Multiple pregnancy.

Abnormalities of extraembryonic structures (placenta, amniotic membranes and umbilical cord). Polyhydramnios and oligohydramnios: causes, diagnosis, management, possible consequences for the fetus and newborn. Hereditary and congenital diseases of the fetus. Prenatal genetic counseling, indications. Prenatal screening and diagnosis.

Multiple pregnancy: classification, diagnosis, management of multiple pregnancy. Mode of delivery in multiple pregnancies.

## Topic 16. Foetal distress. Intrauterine growth restriction.

Placental dysfunction, foetal distress, fetal growth restriction: risk factors, classification, diagnosis, management, prevention.

Methods of assessment of foetal condition: non-invasive - ultrasound, CTG, fetal biophysical profile, Doppler, MRI; invasive - amniocentesis, cordocentesis, chorionic villus sampling. Diagnostic tests for prenatal genetic screening.

# Topic 17. Isoantigenic incompatibility of maternal and foetal blood.

Immunological incompatibility of maternal and foetal blood (Rh-, ABO-system, isoleukocyte, etc.). Pathogenesis, diagnosis, management, treatment, and prevention.

# Topic 18. Gestosis of early terms of pregnancy. Hypertensive disorders during pregnancy. Pre-eclampsia. Eclampsia.

Gestosis of early terms of pregnancy: classification, symptoms, diagnosis, treatment. Hypertensive disorders during pregnancy. Pre-eclampsia: pathogenesis, classification, diagnosis, management, prevention. Eclampsia: symptoms, diagnosis, complications, emergency care, management. HELLP syndrome: symptoms, diagnosis, complications, emergency care, management. Rare types of gestosis.

# Topic 19. Miscarriage. Preterm labour.

Possible causes of spontaneous abortion at different gestational ages. Classification, symptoms, diagnosis, treatment and prevention of spontaneous abortion. Cervical insufficiency: diagnosis, management. Prevention of miscarriage.

Preterm labour: causes, diagnosis, management. Management of preterm premature rupture of the membranes (PPROM). Prevention of preterm delivery.

# Topic 20. Contracted pelvis. Foetal malposition and malpresentation. Breech presentation.

Abnormalities of the female pelvis. Classification. Diagnosis of contracted pelvis. Synclitic and asynclitic engagement. Clinical features and management. Cephalopelvic disproportion. Diagnosis, management.

Abnormal lie, fetal malpresentation and malposition: classification, diagnosis, management.

Breech presentation: classification, diagnosis. Management of breech presentation. External cephalic version. Biomechanism of labour in breech presentation. Management of breech delivery.

# Topic 21. Abnormal uterine action. Birth trauma. Operative Obstetrics.

Abnormal uterine action: classification, risk factors, pathogenesis. Modern diagnosis and management. Prevention of abnormal uterine action. Possible consequences. Fetal distress during labour: diagnosis, management.

Traumatic injuries of the vulva, vagina, perineum. Cervical rupture. Uterine rupture: classification, the mechanism of the uterine rupture. Clinical features of the uterine rupture: threatened uterine rupture, uterine rupture that has happened. Clinical features of the uterine scar rupture. Diagnosis, management and prevention. Uterine inversion. Diastasis of the pubic symphysis. Rupture of the pubic symphysis. Postpartum fistulas. Aetiology, management, prevention.

Operative interventions in Obstetrics: abortion procedures. Operations to prepare the birth canal for delivery (amniotomy, episiotomy). The indications for obstetric forceps, vacuum extraction of the foetus and C-section. Operative interventions during postpartum period. Manual removal of placenta. Manual and instrumental uterine cavity revision in the postpartum period.

Indications for hysterectomy (supracervical and total hysterectomy), ligation of the internal iliac arteries.

# Topic 22. Obstetric bleeding during the second half of pregnancy, childbirth and the postpartum period. Management of obstetric haemorrhage.

Obstetric bleeding. Placenta previa: etiology, pathogenesis, classification, clinical features, diagnosis, management. Placental abruption: etiology, clinical features, diagnosis. Couvelaire uterus (utero-placental apoplexy). Postpartum uterine bleeding. Hypotonic bleeding. Coagulopathic bleeding. Amniotic fluid embolism. Emergency care. Management of obstetric haemorrhage.

# Topic 23. Postpartum septic diseases.

Postpartum septic diseases: postpartum septic wound, postpartum metroendometritis, metrophlebitis, lactational mastitis, postpartum peritonitis, peritonitis after caesarean section. Obstetric sepsis: classification, aetiology, pathogenesis, diagnosis, modern management, prevention. Septic shock, emergency care. Treatments for suppression of lactation

# Topic 24. Disorders of the menstrual function in reproductive age. Neuroendocrine syndromes in Gynaecology. Age-associated physiological and pathological changes of reproductive system.

Menstrual disorders in women of reproductive age, neuroendocrine syndromes (premenstrual syndrome, menstrual cramps, climacteric syndrome, polycystic ovary syndrome).

Modern methods of examination of girls and adolescents with gynaecological diseases. Menstrual disorders in adolescence, classification, diagnosis and management. Amenorrhea. Juvenile uterine bleeding. Management, rehabilitation and prevention of menstrual disorders in adolescents.

Disorders of sexual development. Disorders of sexual development in adolescents.

Inflammatory diseases of genital organs in girls and adolescents. Clinical features, diagnosis and management. Birth control options for teens. Contraception selection, barrier and hormonal methods of birth control.

Perimenopause. Aging changes in the female reproductive system. Pathological conditions in the perimenopause.

Pelvic organ prolapse: diagnosis, clinical features, management, prevention.

## Topic 25. Genitourinary infections and inflammations in women.

Modern methods of diagnosis and management of genitourinary infections and inflammations in women. Diagnosis, treatment and prevention of sexually transmitted diseases.

# Topic 26. Benign tumours of the female reproductive system. Benign breast disorders. Endometriosis.

Benign tumours of the female reproductive system. Diagnosis, management and prophylaxis.

Benign breast disorders. Breast tumours (breast cysts, fibrocystic breast disease). Modern methods of diagnosis, treatment and prophylaxis.

Endometriosis. Modern aspects of aetiopathogenesis, diagnosis, management and prophylaxis.

# Topic 27. Precancerous lesions of the female genital tract. Malignant tumours of the female reproductive system.

Precancerous lesions of the female genital tract. Malignant tumours of the female reproductive system. Modern methods of diagnosis, management and prevention.

# Topic 28. Gynaecological emergencies. Gynaecological surgery. Preoperative and postoperative care in Gynaecology. Prophylaxis of HIV infection.

Gynaecological emergencies (ovarian apoplexy, torsion of the ovarian tumour, torsion of pedunculated subserous uterine leiomyoma, tubo-ovarian abscess): methods of diagnosis and care. Abnormal uterine bleeding: methods of diagnosis and emergency care. Emergency treatment in gynaecology using different methods of surgery. Traumatic injuries of the female genitalia. Clinical features, diagnosis and management.

Acute abdominal pain differential diagnosis (appendicitis, intestinal obstruction, cholecystitis, renal colic, perforated gastric ulcer). Prevention of gynaecological emergencies.

Indications, contraindications, and methods of gynaecological surgery: uterus and cervix surgeries (conservative myomectomy, supracervical and total hysterectomy), salpingo-oophorectomy, surgery for pelvic organ prolapse. Artificial termination of pregnancy in early and late terms, indications, methods, possible complications. Gynaecological endoscopy.

Preoperative and postoperative care in Gynaecology. Possible postoperative complications. Prevention of possible complications. Rehabilitation after gynaecological surgery.

Prevention of HIV infection. Reducing the risk of blood-borne virus exposure. Post-exposure prophylaxis.

# Topic 29. Infertility in couples. Modern aspects of family planning. Contraception methods. Medical eligibility criteria for contraceptive use according to the WHO.

Medical and social significance of the problem of infertility in couples.

Infertility risk factors. Evaluation and management of the infertile couple. Indications for using of assisted reproductive technologies.

Contraceptive counselling: steps in family planning counselling. Age-appropriate contraception counselling.

Modern contraception methods: classification, mechanism of action, advantages, disadvantages. Physical examination before initiating contraception. Postpartum and postabortion family planning.

Medical eligibility criteria for contraceptive use (WHO): categories, summary tables. Contraception methods for women with HIV.

# Topic 30. Physiology of pregnancy, labour and postpartum period. Perinatal foetal protection. Pharmacotherapy in Obstetrics.

General management principles of the pregnant woman. Modern management of labour and the postpartum period. Modern evaluation of the foetus and foetal wellbeing. Prenatal screening. Antenatal screening for foetal structural anomalies. Features of pharmacotherapy in different stages of pregnancy and in the postpartum period. The main principles of medical ethics and deontology. Postpartum family planning.

# Topic 31. Gestosis of early terms of pregnancy. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia.

Aetiology and pathogenesis of gestosis. Gestosis of early terms of pregnancy (morning sickness, hypersalivation). Clinical features, diagnosis, management. Hypertensive conditions during pregnancy. Swelling during pregnancy. Proteinuria in pregnancy. Preeclampsia. Eclampsia. HELLP syndrome. Clinical features, diagnosis, differential diagnosis, possible complications, modern management during pregnancy, labour and postpartum period. Emergency aid. Prevention of preeclampsia, rehabilitation.

Rare types of gestosis.

# Topic 32. Miscarriage. Postterm pregnancy. Multiple pregnancy.

Aetiology and pathogenesis of miscarriage. Classification, clinical features, diagnosis, modern management. Preterm labour. Management of preterm labour. Prevention of miscarriage.

Aetiology and pathogenesis of postterm pregnancy. Methods of diagnosis of postterm pregnancy. Features of the course of pregnancy and labour. Influence on fetus. Mode of delivery in case of postterm pregnancy. Management of postterm pregnancy. Prevention of the postterm pregnancy. Treatment of complications related to postterm pregnancy.

Multiple pregnancy: classification and diagnosis. Management of pregnancy and labour in case of multiple pregnancy. Twin-to-twin transfusion syndrome, twin pregnancy complicated by single intrauterine death.

# Topic 33. Anomalies of the pelvic bone. Macrosomia in Obstetrics. Cephalopelvic disproportion in labour. Foetal malposition and malpresentation. Pelvic presentation. Anomalies of labour action. Birth and maternal traumatism.

Abnormalities of the female pelvis. Management in case of contracted pelvis. Features of the course of labour in case of macrosomia. Cephalopelvic disproportion, management of labour.

Pregnancy and labour in breech presentation. Foetal malpresentation and malposition. Methods of diagnosis. Management of foetal malpresentation and malposition.

Abnormal uterine action: classification, aetiology, pathogenesis of different types. Modern methods of diagnosis. Management of abnormal uterine action. Prevention of abnormal uterine action.

Birth trauma, maternal birth trauma. Types of birth injuries to mothers. Modern methods of diagnosis of birth trauma. Management of birth trauma. Management of maternal birth injuries. Features of the course of pregnancy and labour in women with an uterine scar. Prevention of obstetric injuries.

Topic 34. Obstetrical bleeding in pregnancy, labour and postnatal period. Haemorrhagic shock. DIC - syndrome. Intensive therapy and resuscitation during bleeding in Obstetrics.

Obstetrical bleeding in pregnancy, labour and postpartum period. Aetiology, pathogenesis, clinical features, diagnosis. Management of obstetric haemorrhage. Haemorrhagic shock. DIC - syndrome. Current approach to management of obstetric haemorrhage.

# Topic 35. Pregnancy and labour in women with extragenital diseases. Immunological incompatibility of maternal and foetal blood. Perinatal infections. Prophylaxis of vertical transmission of HIV.

Pregnancy and labour in women with cardiovascular diseases (cardiac defect, hypertension, arterial hypotension), urinary system diseases, respiratory system diseases, gastrointestinal diseases, liver dysfunction and gallbladder diseases, endocrine disorders, nervous system diseases, disorders of the eyes, acute and chronic infectious diseases, tuberculosis. Features of course of pregnancy and labour in case of gynaecological diseases. Management of pregnancy and labour in acute surgical diseases.

Maternal-fetal blood incompatibility (Rh-, ABO-system, isoleukocyte, etc.). Pathogenesis, diagnosis, management of pregnancy, labour and postpartum period. Prevention of maternal-foetal blood incompatibility.

Perinatal infections in pregnant women: clinical features, diagnosis, management, treatment, prevention. Features of course of pregnancy and labour in HIV-positive women. Prevention of vertical HIV transmission.

# Topic 36. Placental dysfunction, hypotrophy of the foetus, foetal distress. Anomalies of development of fertilized ovum.

Aetiology, pathogenesis of placental dysfunction, foetal distress and foetal growth restriction. Modern perinatal diagnostic technologies. Current approaches in the clinical management of pathological conditions of the foetus in pregnancy and labour.

Abnormalities of the fertilized ovum. Abnormalities of extraembryonic structures (placenta, amniotic membranes and umbilical cord). Trophoblastic diseases (molar pregnancy). Polyhydramnios and oligohydramnios: causes, diagnosis, management, possible consequences for the foetus and newborn.

# Topic 37. Surgical intervention in obstetrical practice. Postpartum septic diseases.

Operative vaginal delivery and C-section. Indications, contraindications, steps of operative procedure. Types of anaesthesia. Instruments. Basics concepts about asepsis and antiseptics. Modern management of postpartum period.

Postpartum septic diseases. Classification, aetiology, pathogenesis, diagnosis, modern management, prevention. Emergency care. Indications for surgical intervention in obstetrical practice.

# 4. STRUCTURE OF THE STUDY SUBJECT

4<sup>th</sup> course

		Number of hours						
Topics		including						
	Total	lectures	seminars	practical	laboratory	independent		
				classes	classes	work		
Topic 1. Organization of obstetric and gynaecological service in Ukraine. The contribution of family doctor in providing obstetric and gynaecological care.	2	0	0	0	0	2		
Topic 2. Clinical anatomy and	11	0	0	8	0	3		

physiology of the female reproductive organs. Methods of examination of gynaecologic patients. General symptomology in Gynaecology.						
Topic 3. Neuroendocrine regulation. Dysfunction of the female reproductive system.	8	1	0	4	0	3
Topic 4. Neuroendocrine syndromes in Gynaecology.	7	1	0	4	0	2
Topic 5. Benign tumors of the female reproductive organs. Endometriosis. Breast formation.	12	1	0	8	0	3
<b>Topic 6</b> . Precancerous diseases of the female reproductive organs.	12	1	0	8	0	3
Topic 7. Inflammatory diseases of the female reproductive organs.	13	1	0	8	0	4
Topic 8. "Acute abdomen" in gynaecological practice.	7	1	0	4	0	2
<b>Topic 9</b> . Infertility in couples.	6	0	0	4	0	2
<b>Topic 10.</b> Family planning/contraception methods	6	0	0	4	0	2
Multiple Choice Questions (MCQs)	4	0	0	2	0	2
Differentiated Testing	2	0	0	0	0	2
Total:	90	6	0	54	0	30

# 5<sup>th</sup> course

Number of hours
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Topics	Total		including			
		lectures	seminars	practical classes	laboratory classes	independent work
Topic 11.  Maternal pelvis.  The foetus as an object of labour.	7	0	0	4	0	3
Topic 12. Physiology of pregnancy. Methods of examination of pregnant women. Perinatal care.	9	2	0	4	0	3
Topic 13. Physiology of labour. Labour analgesia.	7	0	0	4	0	3
Topic 14. Physiology of the postpartum period. Physiology of the neonatal period.	6	0	0	4	0	2
Topic 15. Anomalies in the development of the fertilized ovum. Multiple pregnancy.	7	0	0	4	0	3
Topic 16. Foetal distress. Intrauterine growth restriction.	9	2	0	4	0	3
Topic 17. Isoantigenic incompatibility of maternal and foetal blood.	6	0	0	4	0	2
Topic 18. Gestosis of early terms of pregnancy. Hypertensive disorders of pregnancy. Preeclampsia. Eclampsia.	13	2	0	8	0	3
Topic 19. Miscarriage. Preterm labour.	8	2	0	4	0	2
Topic 20.	7	0	0	4	0	3

Contracted pelvis.						
Foetal						
malposition and						
malpresentation.						
Breech						
presentation.						
Topic 21.	11	0	0	8	0	3
Abnormal uterine						
action. Birth						
trauma. Operative						
Obstetrics.						
Topic 22.	11	4	0	8	0	3
Obstetric bleeding						
during the second						
half of pregnancy,						
childbirth and the						
postpartum						
period.						
Management of						
obstetric						
haemorrhage.	_	_	_		_	_
Topic 23.	9	0	0	6	0	3
Postpartum septic						
diseases.						
<b>Multiple Choice</b>	4	0	0	2	0	2
Questions						
(MCQs)	_					_
Differentiated	2	0	0	0	0	2
Testing						
Total:	120	12	0	68	0	40

# 6<sup>th</sup> course

				Number o	f hours	
Topics	Total			includ	ing	
		lectur es	seminars	practical classes	laboratory classes	independent work
Topic 24. Disorders of the menstrual function in reproductive age. Neuroendocrine syndromes in Gynaecology. Ageassociated physiological and pathological changes of reproductive system.	6	0	0	4	0	2
Topic 25. Genitourinary infections and	6	0	0	4	0	2

inflammations in						
women.						
Topic 26. Benign tumours of the female reproductive system. Benign breast disorders. Endometriosis.	6	0	0	4	0	2
Topic 27. Precancerous lesions of the female genital tract. Malignant tumours of the female reproductive system.	6	0	0	4	0	2
Topic 28. Gynaecological emergencies. Gynaecological surgery. Preoperative and postoperative care in Gynaecology. Prophylaxis of HIV infection.	6	0	0	4	0	2
Topic 29. Infertility in couples. Modern aspects of family planning. Contraception methods. Medical eligibility criteria for contraceptive use according to the WHO.	6	0	0	4	0	2
Topic 30. Physiology of pregnancy, labour and postpartum period. Perinatal foetal protection. Pharmacotherapy in Obstetrics.	5	0	0	4	0	1
Topic 31. Gestosis of early terms of pregnancy. Hypertensive disorders of pregnancy. Preeclampsia. Eclampsia.	5	0	0	4	0	1
Topic 32. Miscarriage. Postterm pregnancy.	5	0	0	4	0	1

Multiple pregnancy.						
Topic 33. Anomalies of the pelvic bone. Macrosomia in Obstetrics. Cephalopelvic disproportion in labour. Foetal malposition and malpresentation. Pelvic presentation. Anomalies of labour action. Birth and maternal traumatism.	6	0	0	4	0	2
Topic 34. Obstetrical bleeding in pregnancy, labour and postnatal period. Haemorrhagic shock. DIC - syndrome. Intensive therapy and resuscitation during bleeding in Obstetrics.	6	0	0	4	0	2
Topic 35. Pregnancy and labour in women with extragenital diseases. Immunological incompatibility of maternal and foetal blood. Perinatal infections. Prophylaxis of vertical transmission of HIV.	8	0	0	6	0	2
Topic 36. Placental dysfunction, hypotrophy of the foetus, foetal distress. Anomalies of development of fertilized ovum.	5	0	0	4	0	1
Topic 37. Surgical intervention in obstetrical practice. Postpartum septic diseases.	5	0	0	4	0	1
Multiple Choice Questions (MCQs)	4	0	0	2	0	2
Exam	2	0	0	0	0	2

Total:	90	0	0	60	0	30

# 5. THEMES OF LECTURES / SEMINARS / PRACTICAL CLASSES / LABORATORIES

# **5.1.** Themes of lectures

## 4th course

№	Topic			
1.	Lecture 1. Topic 3-4. Neuroendocrine regulation. Dysfunction of the female reproductive system. Neuroendocrine syndromes in Gynaecology. Abnormal uterine bleeding.	2		
2.	Lecture 2. Topic 5-6. Benign tumours of the female reproductive organs. Precancerous diseases of the female reproductive organs.	2		
3.	Lecture 3. Topic 7-8. "Acute abdomen" in gynaecological practice. Inflammatory diseases of the female reproductive organs.	2		
	Total	6		

## 5th course

№	Торіс	Amount of hours
1.	Lecture 1. Topic 12. Physiology of pregnancy.	2
2.	Lecture 2. Topic 16. Foetal distress. Intrauterine growth restriction.	2
3.	Lecture 3. Topic 18. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia. Emergency care.	2
4.	Lecture 4. Topic 19. Miscarriage. Preterm labour.	2
5.	Lecture 5. Topic 22. Obstetric bleeding during the second half of pregnancy, childbirth and the postpartum period. Management of obstetric haemorrhage. Part I.	2
6.	Lecture 6. Topic 22. Obstetric bleeding during the second half of pregnancy, childbirth and the postpartum period. Management of obstetric haemorrhage. Part II.	2
	Total:	12

# 6th course

# **5.1.** Themes of lectures

Lectures are not provided.

# **5.2.** Themes of seminars

Seminars are not provided.

# **5.3.** Themes of practical classes

№	Topic	Amount of hours
1	Topic 2. Practical class 1. Clinical anatomy of the female reproductive organs.	2

2	Topic 2. Practical class 2. Clinical physiology of the female reproductive organs.	2
3	Topic 2. Practical class 3. Methods of examination of gynecologic patients.	2
4	Topic 2. Practical class 4. General symptomology in Gynaecology.	2
5	Topic 3. Practical class 5. Neuroendocrine regulation of the female reproductive system.	2
6	Topic 3. Practical class 6. Dysfunction of the female reproductive system.	2
7	Topic 4. Practical class 7. Neuroendocrine syndromes in Gynaecology: premenstrual syndrome, menopausal syndrome, polycystic ovary syndrome. Clinical features, modern diagnosis and management.	2
8	Topic 4. Practical class 8. Neuroendocrine syndromes in Gynecology: Sheehan syndrome, hyperandrogenism, hyperprolactinemia. Clinical features, modern diagnosis and management.	2
9	Topic 5. Practical class 9. Benign tumours of the uterus.	2
10	Topic 5. Practical class 10. Benign tumours of the ovaries.	2
11	Topic 5. Practical class 11. Endometriosis.	2
12	Topic 5. Practical class 12. Breast formation.	2
13	Topic 6. Practical class 13. Precancerous diseases of the female external genitalia.	2
14	Topic 6. Practical class 14. Precancerous diseases of the uterine cervix.	2
15	Topic 6. Practical class 15. Endometrial hyperplasia: aetiology, pathogenesis, classification, modern diagnosis and management.	2
16	Topic 6. Practical class 16. Prevention of precancerous diseases of the female reproductive organs.	2
17	Topic 7. Practical class 17. Inflammatory diseases of the female reproductive organs: aetiology, pathogenesis, classification.	2
18	Topic 7. Practical class 18. Non-sexually transmitted infections (vulvitis, bartolinitis, vaginitis, endocervicitis, endometritis, adnexitis, parametritis, pelvioperitonitis). Diagnosis, treatment and prophylaxis of bacterial vaginosis.	2
19	Topic 7. Practical class 19. Sexually transmitted infections (trichomoniasis, gonorrhea, candidiasis, viral infections, ureaplasmosis, mycoplasmosis, chlamydiasis). Tuberculosis of the female reproductive organs.	2
20	Topic 7. Practical class 20. Management of acute and chronic diseases. Indications for surgical treatment.	2
21	Topic 8. Practical class 21. "Acute abdomen" in gynaecological practice. Ectopic pregnancy, ovarian apoplexy. Clinical features, diagnosis, management. Emergency care.	2
22	Topic 8. Practical class 22. Preoperative and postoperative management in Gynaecology. Rehabilitation after gynaecological surgery.	2
23	Topic 9. Practical class 23. Infertility in couples. Causes of female and male infertility. Examination of married couples with infertility.	2
24	Topic 9. Practical class 24. Modern management of female infertility (hormonal, surgical, advanced reproductive technologies).	2
25	Topic 10. Practical class 25. Family planning. Family planning counseling: directions, benefits, counseling process. Physical examination before initiating	2

	contraception. Medical eligibility criteria for contraceptive use.	
26	Topic 10. Practical class 26. Methods of contraception: COC pills, vaginal ring, contraceptive patches, progestin-only pills, injection, IUDs, barrier methods and spermicides. Fertility awareness methods, voluntary surgical contraception, emergency contraception.	2
27	Multiple Choice Questions (MCQs)	2
	Total	54

№	Topic	Amount of hours
1.	Topic 11. Practical class 1. Maternal pelvis.	2
2.	Topic 11. Practical class 2. Foetus as an object of labour.	2
3.	Topic 12. Practical class 3. Physiology of pregnancy.	2
4.	Topic 12. Practical class 4. Methods of examination of pregnant women. Perinatal care.	2
5.	Topic 13. Practical class 5. Physiology of labour.	2
6.	Topic 13. Practical class 6. Labour analgesia.	2
7.	Topic 14. Practical class 7. Physiology of the postpartum period.	2
8.	Topic 14. Practical class 8. Physiology of the neonatal period.	2
9.	Topic 15. Practical class 9. Anomalies in the development of the fertilized ovum.	2
10.	Topic 15. Practical class 10. Multiple pregnancy.	2
11.	Topic 16. Practical class 11. Foetal distress.	2
12.	Topic 16. Practical class 12. Intrauterine growth restriction.	2
12	Topic 17. Practical class 13. Isoantigenic incompatibility of maternal and	2
13.	foetal blood (Rh-system). Pathogenesis, diagnosis, management, treatment, and prevention.	2
14.	Topic 17. Practical class 14. Isoantigenic incompatibility of maternal and foetal blood (ABO-system, isoleukocyte, etc.). Pathogenesis, diagnosis, management, treatment, and prevention.	2
15.	Topic 18. Practical class 15. Gestosis of early terms of pregnancy.	2
16.	Topic 18. Practical class 16. Hypertensive disorders during pregnancy.	2
	Topic 18. Practical class 17. Preeclampsia. Emergency care, management.	2
17.	Topic 18. Practical class 18. Eclampsia. Emergency care, management.	2
18.	Topic 19. Practical class 19. Miscarriage.	2
19.	Topic 19. Practical class 20. Preterm labour.	2
20.	Topic 20. Practical class 21. Contracted pelvis. Foetal malpresentation and malposition.	2
21.	Topic 20. Practical class 22. Breech presentation.	2
22.	Topic 21. Practical class 23. Abnormal uterine action.	2
23.	Topic 21. Practical class 24. Operative Obstetrics.	2
24	Topic 21. Practical class 25. Birth trauma. Traumatic injuries of the vulva, vagina, perineum, cervix. Diastasis and rupture of pubic symphysis. Postpartum fistulas.	2
25	Topic 21. Practical class 26. Birth trauma. Threatened uterine rupture, uterine rupture that has happened. Uterine inversion.	2

26.	Topic 22. Practical class 27. Obstetric bleeding in the second half of pregnancy.	2
27	Topic 22. Practical class 28. Obstetric bleeding in labour.	2
28	Topic 22. Practical class 29. Postpartum obstetric bleeding.	2
29.	Topic 22. Practical class 30. Amniotic fluid embolism.	2
30.	Topic 23. Practical class 31. Postpartum septic diseases: postpartum septic wound, postpartum metroendometritis, metrophlebitis, lactational mastitis, postpartum peritonitis, peritonitis after caesarean section.	2
31.	Topic 23. Practical class 32. Obstetric sepsis: classification, aetiology, pathogenesis, diagnosis, modern management, prevention.	2
32	Topic 23. Practical class 33. Septic shock, emergency care.	2
33.	Multiple Choice Questions (MCQs)	2
	Total	68

Nº	Торіс	Amount of hours
1.	Topic 24. Practical class 1. Disorders of the menstrual function in reproductive age. Neuroendocrine syndromes in Gynaecology.	2
2.	Topic 24. Practical class 2. Age-associated physiological and pathological changes of reproductive system.	2
3.	Topic 25. Practical class 3. Genitourinary infections and inflammations in women.	2
4.	Topic 25. Practical class 4. Diagnosis, treatment and prevention of sexually transmitted diseases.	2
5.	Topic 26. Practical class 5. Benign tumours of the female reproductive system. Benign breast disorders.	2
6.	Topic 26. Practical class 6. Endometriosis.	2
7.	Topic 27. Practical class 7. Precancerous diseases of the female genital tract.	2
8.	Topic 27. Practical class 8. Malignant tumours of the female reproductive system. Modern methods of diagnosis, management and prevention.	2
9.	Topic 28. Practical class 9. Gynaecological emergencies. Gynaecological surgery.	2
10.	Topic 28. Practical class 10 Preoperative and postoperative care in Gynaecology. Prevention of HIV infection.	2
11.	Topic 29. Practical class 11. Infertility in couples.	2
12.	Topic 29. Practical class 12. Modern contraception methods. Medical eligibility criteria for contraceptive use (WHO).	2
13.	Topic 30. Practical class 13. Physiology of pregnancy, labour and postpartum period.	2
14.	Topic 30. Practical class 14. Perinatal protection of foetus. Pharmacotherapy in Obstetrics.	2
15.	Topic 31. Practical class 15. Gestosis of early terms of pregnancy (morning sickness, hypersalivation).	2
16.	Topic 31. Practical class 16. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia.	2
17.	Topic 32. Practical class 17. Miscarriage. Postterm pregnancy.	2
18.	Topic 32. Practical class 18. Multiple pregnancy.	2

19.	Topic 33 Practical class 19. Anomalies of the pelvic bone. Macrosomia in	2
	Obstetrics. Cephalopelvic disproportion.	<b>1</b>
20.	Topic 33. Practical class 20. Foetal malpresentation and malposition. Breech	2.
	presentation. Abnormal uterine action. Birth trauma, maternal birth trauma.	2
21.	Topic 34 Practical class 21. Obstetric bleeding in pregnancy, labour and	2
	postpartum period.	2
22.	Topic 34. Practical class 22. Haemorrhagic shock. DIC - syndrome.	2
	Intensive therapy and resuscitation in case of obstetric haemorrhage.	2
23.	Topic 35. Practical class 23. Pregnancy and labour in women with	2
	extragenital diseases.	
24.	Topic 35. Practical class 24. Maternal-foetal blood incompatibility. Perinatal	2
	infections.	2
25	Topic 35. Practical class 25. Prevention of vertical HIV transmission.	2
26.	Topic 36. Practical class 26. Placental dysfunction, hypotrophy of the foetus,	2
	foetal distress.	2
27.	Topic 36. Practical class 27. Anomalies of development of fertilized ovum.	2
28.	Topic 37. Practical class 28. Surgical intervention in obstetrical practice.	2
29.	Topic 37. Practical class 29. Postpartum septic diseases.	2
30.	Multiple Choice Questions (MCQs)	2
	Total	60

# **5.4.** Themes of laboratory classes

Laboratory classes are not included.

# 6. INDEPENDENT WORK FOR A STUDENT

# 4<sup>th</sup> course

Nº	Types of IWS	Amount of hours
1	Topic 1. Organization of obstetric and gynaecological care in Ukraine.	2
1	The contribution of family doctor in providing obstetric and	<i>_</i>
	gynaecological care.	
2	Topic 2. Preparation to the practical classes $1-2-3-4$	2
3	Topic 3. Preparation to the practical classes $5-6$	3
4	Topic 4. Preparation to the practical classes 7 – 8	2
5	Topic 5. Preparation to the practical classes $9 - 10 - 11 - 12$	3
6	Topic 6. Preparation to the practical classes $13 - 14 - 15 - 16$	3
7	Topic 7. Preparation to the practical classes $17 - 18 - 19 - 20$	4
8	Topic 8. Preparation to the practical classes $21-22$	3
9	Topic 9. Preparation to the practical classes 23 – 24	2
10	Topic 10. Preparation to the practical classes 25 – 26	2
11	Preparation for MCQs	2
12	Preparation for Differentiated Testing	2
	Total hours	30

# 5<sup>th</sup> course

Nº	Types of IWS	Amount of hours
1	Topic 11. Preparation to the practical classes $1-2$	3

2	Topic 12. Preparation to the practical classes 3 – 4	3
3	Topic 13. Preparation to the practical classes $5-6$	3
4	Topic 14. Preparation to the practical classes 7 – 8	2
5	Topic 15. Preparation to the practical classes $9-10$	3
6	Topic 16. Preparation to the practical classes $11 - 12$	3
7	Topic 17. Preparation to the practical classes 13 – 14	2
8	Topic 18. Preparation to the practical classes $15 - 18$	3
9	Topic 19. Preparation to the practical classes $19-20$	2
10	Topic 20. Preparation to the practical classes $21 - 22$	3
11	Topic 21. Preparation to the practical classes $23 - 26$	3
12	Topic 22. Preparation to the practical classes 27 – 28	3
13	Topic 23. Preparation to the practical classes 29 – 30	3
14	Preparation for MCQs	2
15	Preparation for Differentiated Testing	2
	Total	40

# 6<sup>th</sup> course

Nº	Types of IWS	Amount of hours
1	Topic 24. Preparation to the practical classes $1-2$	2
2	Topic 25. Preparation to the practical classes 3 – 4	2
3	Topic 26. Preparation to the practical classes $5-6$	2
4	Topic 27. Preparation to the practical classes 7 – 8	2
5	Topic 28. Preparation to the practical classes 9 – 10	2
6	Topic 29. Preparation to the practical classes 11 – 12	2
7	Topic 30. Preparation to the practical classes 13 – 14	1
8	Topic 31. Preparation to the practical classes 15 – 16	1
9	Topic 32. Preparation to the practical classes 17 – 18	1
10	Topic 33. Preparation to the practical classes 19 – 20	2
11	Topic 34. Preparation to the practical classes 21 – 22	2
12	Topic 35. Preparation to the practical classes 23 – 25	2
13	Topic 36. Preparation to the practical classes 26 – 27	1
14	Topic 37. Preparation to the practical classes 28 – 29	1
15	Preparation for MCQs	2
16	Preparation for the exam	2
	Total	30

## 7. TEACHING METHODS

Lectures: problematic, overview, conceptual and analytical.

**Practical classes:** conversation, role-playing games, situational tasks, practical skills - physical examination, medical manipulations according to list 5, practical skills on simulation phantoms, practical medical training in the differential diagnosis of obstetric and gynecological pathology.

**Independent work:** independent work with recommended basic and additional literature, with electronic information resources; independent work with the bank of test tasks KROK-2.

# 8. FORMS OF CONTROL AND EVALUATION METHODS

## (INCLUDING CRITERIA FOR EVALUATING LEARNING OUTCOMES)

**Ongoing control:** oral assessment, assessment of practical skills, communication skills during role-playing, solving of situational clinical tasks, assessment of learning activities, test control.

**Final control**: Differentiated Testing (4th course, 5th course), Exam (6th course). **Assessment of the ongoing learning activities:** 

- 1. Assessment of the theoretical knowledge according to the topic:
  - methods: individual oral assessment, solving of situational clinical task
  - the maximum score -5, the minimum score -3, the unsatisfactory score -2.
- 2. Assessment of practical skills and medical techniques according to the topic:
  - methods: assessment of the practical skill
  - the maximum score -5, the minimum score -3, the unsatisfactory score -2.
- 3. Assessment of the medical care according to the topic:
  - methods: assessment of: a) communication skills of communicating with the patient and his parents, b) the correctness of prescribing and evaluating laboratory and instrumental studies, c) compliance with the differential diagnosis algorithm, d) substantiation of the clinical diagnosis, e) drawing up a treatment plan
  - the maximum score 5, the minimum score 3, the unsatisfactory score 2.

The score for one practical class is the arithmetic average of all components and can only have an integer value (5, 4, 3, 2), which is rounded statistically.

## Criteria of ongoing assessment at the practical class

Rating	Criteria assessment
«5»	The student is fluent in the material, takes an active part in discussing and solving a
	situational clinical problem, confidently demonstrates practical skills during the
	examination of a patient and interpretation of clinical, laboratory and instrumental
	studies, expresses his opinion on the topic, demonstrates clinical thinking.
«4»	The student is well versed in the material, participates in the discussion and solution
	of situational clinical problems, demonstrates practical skills during the
	examination of a patient and interpretation of clinical, laboratory and instrumental
	studies with some errors, expresses his opinion on the topic, demonstrates clinical
	thinking.
«3»	The student does not have enough material, uncertainly participates in the
	discussion and solution of the situational clinical problem, demonstrates practical
	skills during the examination of a patient and interpretation of clinical, laboratory
	and instrumental studies with significant errors.
«2»	The student does not have the material, does not participate in the discussion and
	solution of the situational clinical problem, does not demonstrate practical skills
	during the examination of a patient and the interpretation of clinical, laboratory and
	instrumental studies.

The student is admitted to the differential test (4th course, 5th course) or final exam (6th course) provided that the requirements of the curriculum are met and if for the current educational activity, he received at least 3.00 points and passed the test control for the tests "KROK-2" not less than 80% (50 tasks).

The test control is held in the Educational and Production Complex of Innovative Technologies of Learning, Informatization and Continuous Education of ONMedU in the last class before the Differential test (the exam).

The content of the evaluated activity	Scores
Answer theoretical question 1	2,5
Answer theoretical question 2	2,5

# Exam Card example for a student of the 4th year

- 1. Abnormal uterine bleeding during the reproductive period: etiology, clinical features, diagnosis, modern management.
- 2. Emergency contraception: modern management.

# Exam Card example for a student of the 5th year

- 1. Diagnosis of early pregnancy term. Presumptive, probable and positive signs of pregnancy.
- 2. Eclampsia: definition. Emergency care.

# Exam Card example for a student of the 6th year

- 1. Cervical ectopic pregnancy. Clinical features, diagnosis, modern management.
- 2. Obstetric bleeding during the second half of pregnancy: causes. Modern management.

# Criteria for assessing the learning outcomes of students in the Final Control:

	in the rmai Control.						
«5»	The student completed all the tasks correctly, accurately and completely, clearly and						
	logically answered the questions posed by the examiners. Thoroughly and						
	comprehensively knows the content of theoretical issues, fluent in professional and						
	scientific terminology. Thinks logically and constructs an answer, freely uses acquired						
	theoretical knowledge when analyzing practical tasks.						
«4»	The student completed all the tasks sufficiently fully, clearly and logically answered the						
	questions posed by the examiners. He knows the content of theoretical issues deeply and						
	comprehensively, and has professional and scientific terminology. Thinks logically and						
	constructs an answer, uses acquired theoretical knowledge when analyzing practical						
	tasks. But when teaching some questions, there is not enough depth and argumentation,						
	it makes insignificant mistakes, which are eliminated by the applicant himself when the						
	examiner points them out.						
«3»	The student completed all the tasks incompletely, the answers to additional and leading						
	questions are vague and vague. Possesses a basic amount of theoretical knowledge, uses						
	professional and scientific terminology inaccurately. Experiences significant difficulties						
	in constructing an independent logical answer, in applying theoretical knowledge in the						
	analysis of practical tasks.						
«2»	The student did not complete the task, in most cases did not answer the additional and						
	leading questions of the examiners. He did not master the basic amount of theoretical						
	knowledge, he showed a low level of mastery of professional and scientific terminology.						
	Answers to questions are fragmentary, inconsistent, illogical, cannot apply theoretical						
	knowledge when analyzing practical tasks						

## 9. DISTRIBUTION OF POINTS RECEIVED BY STUDENTS

The average score for the discipline is translated into a national grade and converted into scores on a multi-point scale (200-point scale).

# Table for conversion of traditional assessment into multi-point:

National assessment for discipline	The sum of points for the discipline		
Excellent ("5")	185 - 200		
Good ("4")	151 - 184		

Satisfactory ("3")	120-150
Unsatisfactory ("2")	Below 120

A multi-point scale (200-point scale) characterizes the actual success of each applicant in learning the educational component. The conversion of the traditional grade (average score for the academic discipline) into a 200-point grade is performed by the information and technical department of the University.

According to the obtained points on a 200-point scale, the achievements of the applicants are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows you to evaluate the achievements of students from the educational component who are studying in the same course of the same specialty, according to the points they received.

The ECTS scale is a relative-comparative rating, which establishes the applicant's belonging to the group of better or worse among the reference group of fellow students (faculty, specialty). An "A" grade on the ECTS scale cannot be equal to an "excellent" grade, a "B" grade to a "good" grade, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" according to the ECTS scale do not coincide with the limits of grades "5", "4", "3" according to the traditional scale. Acquirers who have received grades of "FX" and "F" ("2") are not included in the list of ranked acquirers. The grade "FX" is awarded to students who have obtained the minimum number of points for the current learning activity, but who have not passed the final examination. A grade of "F" is given to students who have attended all classes in the discipline, but have not achieved a grade point average (3.00) for the current academic activity and are not admitted to the final exam.

Students who study in one course (one specialty), based on the number of points scored in the discipline, are ranked on the ECTS scale as follows:

# Conversion of traditional assessment in the discipline and the amount of points on the ECTS scale

Assessment on the ECTS scale	Statistical indicator	
A	The best 10% of students	
В	The next 25% of students	
C	The next 30% of students	
D	The next 25% of students	
E	The next 10% of students	

#### 10. METHODOLOGICAL SUPPORT

- Working program of the discipline
- Syllabus
- Methodological recommendations for the lectures
- Methodological recommendations for the practical classes in the discipline
- Methodological recommendations for the independent work of higher education applicants
- Multimedia presentations
- Situational clinical tasks
- Scenarios of role-playing games (if necessary)
- Electronic bank of test tasks by subdivisions of the discipline

## Educational and methodical literature:

- 1. Obstetrics: student's book = Акушерство: підручник / Gladchuk I.Z., Ancheva I.A. Vinnytsia: Nova Knyga, 2021. –288 р.
- 2. Obstetrics and Gynecology: in 2 vol.:textbook. Volume 2. Gynecology / V.I. Gryshchenko, M.O. Shcherbina, B.M. Ventskivskyi et al.; edited by V.I. Gryshchenko, M.O. Shcherbina. 3th edition. K.: AUS Medicine Publishing, 2022 352 p.
- 3. Obstetrics and Gynecology: in 2 vol.:textbook. Volume 1. Obstetrics / V.I. Gryshchenko, M.O. Shcherbina, B.M. Ventskivskyi et al.; edited by V.I. Gryshchenko, M.O. Shcherbina. 2th edition. K.: AUS Medicine Publishing, 2018 392 p.

- 4. Oats, Jeremy Fundamentals of Obstetrics and Gynaecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynaecology / J. Oats, S. Abraham. 10<sup>th</sup> ed. Edinburgh [etc.]: Elsevier, 2017. VII, 375 p.
- 5. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. 384 pp.
- 6. The FIGO Textbook of Pregnancy Hypertension. An evidence-based guide to monitoring, prevention and management. L. A. Magee, P. Dadelszen, W. Stones, M. Mathai (Eds), The Global Library of Women's Medicine. 2016. 456 pp.
- 7. Dutta, Durlav Chandra. D. C. Dutta's Textbook of Gynecology including Contraception / D.C. Dutta; ed/ Hiralal Konar. 7<sup>th</sup>.ed. New Delhi: Jaypee Brothers Medical Publishers, 2016. XX, 574 p.

# 11. LIST OF QUESTIONS FOR PREPARING FOR THE FINAL CONTROL

- 1. Clinical anatomy and physiology of female reproductive organs.
- 2. Special gynaecological anamnesis.
- 3. General and special methods of examination of gynaecological patients.
- 4. Basic special methods of examination in Gynaecology: examination of external genital organs, speculum examination, bimanual examination.
- 5. Methods for evaluation of ovarian function.
- 6. Laboratory tests in Gynaecology: bacterioscopic/bacteriological test of the female genital tract microflora, PAP smear, PCR, ELISA.
- 7. Instrumental methods of examination in Gynaecology: uterine sounding, dilation and uterine curettage, biopsy, culdocentesis.
- 8. Endoscopic methods in Gynaecology: colposcopy, hysteroscopy, laparoscopy.
- 9. Ultrasound methods in Gynaecology: transvaginal and transabdominal ultrasound examination. Radiation methods in gynaecology: MRI, CT, MSG.
- 10. General symptomatology of gynaecological diseases.
- 11. Classification of disorders of the function of the reproductive system.
- 12. Amenorrhea: classification, diagnostics, management, general practitioners' strategies.
- 13. Abnormal uterine bleeding: classification, clinical features, diagnostics.
- 14. Juvenile uterine bleeding: aetiology, clinical features, diagnostics, emergency care, general practitioners' strategies.
- 15. Abnormal uterine bleeding in the reproductive period: aetiology, clinical features, diagnostics, emergency care, general practitioners' strategies.
- 16. Abnormal bleeding in the perimenopausal period: aetiology, clinical features, diagnostics, emergency care, general practitioners' strategies.
- 17. Dysmenorrhea: aetiology, classification, clinical features, diagnosis and treatment.
- 18. Neuroendocrine syndromes in Gynaecology: premenstrual, menopausal, polycystic ovary syndrome, Sheehan's syndrome, hyperprolactinemia, hyperandrogenism. Clinical features, modern diagnosis and treatment.
- 19. Bartolini's gland cyst: clinical features, diagnostics, complications, treatment.
- 20. Benign ovarian tumours (epithelial, strains of the genital strain, lipid-cellular, germinogenic tumours): clinical features, diagnostics, complications, treatment, general practitioners' strategies.
- 21. Benign tumours of the uterus: clinical features, diagnostics, complications, treatment, indications for surgical treatment, general practitioners' strategies.
- 22. Endometriosis: aetiology, pathogenesis, classification, clinical features, diagnostics, modern methods of treatment, general practitioners' strategies, methods of rehabilitation for reproductive function.
- 23. Benign mammary dysplasia. Breast formation.

- 24. Pre-cancerous diseases of the external genitalia: aetiology, classification, clinical features, diagnosis and treatment.
- 25. Pre-cancerous diseases of the uterine cervix: aetiology, classification, clinical features, diagnosis and treatment.
- 26. Endometrial hyperplasia: aetiology, pathogenesis, classification, diagnosis and treatment, general practitioners' strategies.
- 27. Prophylaxis of precancerous diseases of female reproductive organs.
- 28. Inflammatory diseases of female reproductive organs: classification, aetiology, pathogenesis. Features of the course in different age periods.
- 29. Inflammation of the external genital organs and vagina (vulvitis, bartolinitis, vaginitis): clinical features, diagnosis and treatment.
- 30. Inflammation of the internal reproductive organs (endocervitis, endometritis, adnexitis, parametritis, pelvioperitonitis): clinical features, diagnostics, treatment, general practitioners' strategies.
- 31. Sexually Transmitted Diseases (trichomoniasis, gonorrhea, ureaplasmosis, mycoplasmosis, chlamydia, viral lesions): general practitioners' strategies in the detection of sexually transmitted diseases. Clinical features, diagnosis and treatment.
- 32. Ectopic pregnancy clinical features, diagnostics, emergency care, general practitioners' strategies.
- 33. Ovarian apoplexy: clinical features, diagnostics, emergency care, general practitioners' strategies.
- 34. Causes of female and male infertility. Types of female infertility.
- 35. Examination of an infertile couple.
- 36. Family planning counselling: directions, benefits, counselling process.
- 37. Methods of contraception: COC, vaginal ring, contraceptive plaster, PTP, injection, IUD, barrier methods and spermicides, voluntary surgical sterilization, emergency contraception.
- 38. Family planning for people living with HIV.

- 1. Organization of obstetric care in the city and in the countryside. State strategy of mothers and children healthcare in Ukraine.
- 2. The structures of the maternity hospital. The main indicators of work of maternity hospital. Perinatal statistics.
- 3. The role of women's counselling services in the prevention of complications in pregnancy and childbirth, perinatal care.
- 4. The contribution of a family doctor in the prevention of perinatal diseases and mortality.
- 5. Organization of family planning service: structure, tasks.
- 6. Medical and genetic counselling.
- 7. The anatomy of the female pelvis. Pelvimetry. Pelvic floor.
- 8. The foetus as an object of labour (anatomical structures of the foetal head, diameters of the foetal head).
- 9. Signs of maturity and immaturity of the foetus.
- 10. Critical periods of embryo and foetus development. The placenta, its structure and function.
- 11. Influence of toxicants on the embryo and foetus.
- 12. Physiological changes in pregnancy
- 13. Hygiene and nutrition of the pregnant woman.
- 14. Methods of examination of pregnant women. External and internal obstetric examination.
- 15. Orientation of the foetus in the uterus.
- 16. Determination of gestation age and date of delivery.
- 17. Physiological pregnancy management. Gravidogram.
- 18. Psychoprophylactic preparation for childbirth.
- 19. Preliminary period.
- 20. Assessment of cervix for prediction of time to onset of labour. Modified Bishop's scale.

- 21. Biomechanism of labour in OA and OP position of the foetus.
- 22. Stages of labour. Duration for PP and MP women.
- 23. The first stage of labour. Course, management. Partogram.
- 24. The second stage of labour. Course, management.
- 25. The third stage of labour. Course, management (active and passive). Signs of placental separation.
- 26. Postnatal care of the mother. Physiological and pathological postpartum blood loss.
- 27. Apgar score.
- 28. Postnatal care of the newborn. Skin-to-skin contact. Benefits of the keeping mothers and babies together after delivery (as continuous rooming-in).
- 29. Modern methods of labour analgesia: non-pharmacological and pharmacological.
- 30. Course and management of the postpartum period.
- 31. Changes in reproductive system and general physiological changes in female body in postpartum period.
- 32. Physiology of lactation. Breastfeeding.
- 33. Postpartum contraception: lactation amenorrhea method (LMA).
- 34. Embryonic and foetal periods of development. Blasto-, embryo- and foetopathy. Diagnosis of foetal malformations in different periods of pregnancy.
- 35. Anomalies of extraembryonic elements of the ovum (placenta, amniotic membranes and umbilical cord). Molar pregnancy.
- 36. Polyhydramnios and oligohydramnios: causes, diagnosis, management, possible complications.
- 37. Hereditary and congenital diseases of the foetus. Prenatal genetic counseling, indications. Prenatal screening and diagnosis.
- 38. Multiple pregnancy: classification, diagnosis.
- 39. Course and management of multiple pregnancy. Mode of deliver.
- 40. Placental dysfunction: classification, diagnosis and treatment.
- 41. Foetal distress: risk factors, classification, diagnosis, management, prevention.
- 42. Foetal growth restriction: risk factors, classification, diagnosis, management, prevention.
- 43. Methods of assessment of foetal wellbeing: non-invasive ultrasound, CTG, foetal biophysical profile, Doppler, biochemical markers.
- 44. Immunological incompatibility of maternal and foetal blood (Rh-, ABO-system). Pathogenesis, diagnosis, management.
- 45. Prevention of Rh-incompatibility.
- 46. Gestosis of early terms of pregnancy: classification, symptoms, diagnosis and treatment.
- 47. Hypertensive disorders during pregnancy, classification. Preeclampsia: pathogenesis, classification, diagnostics, clinical features, management, prevention.
- 48. Eclampsia: clinical features, diagnostics, complications, management, emergency care.
- 49. Rare types of gestosis.
- 50. Causes of spontaneous abortion at different gestational ages. Classification, clinical features, diagnostics, treatment and prevention.
- 51. Threatened preterm labour: diagnosis, management.
- 52. Cervical insufficiency: diagnosis, management.
- 53. Preterm labour: causes, diagnosis, management.
- 54. Anatomically contracted pelvis. Cephalopelvic disproportion. Diagnostics.
- 55. Synclitism and asynclitism.
- 56. Breech presentation. Classification. Diagnosis and management.
- 57. Malposition: classification, diagnosis, management.
- 58. Malpresentation: classification, diagnosis, management.
- 59. Mode of delivery in case of malposition and malpresentation.
- 60. Anomalies of labour activity. Classification. Risk factors.
- 61. Uterine inertia. Clinical features, diagnosis and treatment of primary and secondary uterine inertia.
- 62. Uncoordinated birth activity. Clinical features, diagnosis and treatment.

- 63. Over-efficient uterine action. Clinical features, diagnosis and treatment.
- 64. Placenta previa. Aetiology, pathogenesis, classification, clinical features and diagnosis.
- 65. Placental abruption. Aetiology, clinical features, diagnosis. Obstetrical management.
- 66. Abnormal placental attachment. Clinical features, diagnosis, management.
- 67. Obstetric bleeding in the early postpartum period. Hypotonic bleeding. Emergency care.
- 68. Operations to prepare the birth canal for delivery (amniotomy, episiotomy).
- 69. Obstetric forceps. Vacuum extraction of the foetus. Caesarean section. Indications, contraindications.
- 70. Manual detachment of the placenta.
- 71. Traumatic injuries of the vulva, vagina and perineum.
- 72. Cervical rupture during vaginal delivery.
- 73. Uterine ruptures during pregnancy and childbirth: classification, mechanisms of occurrence.
- 74. Clinical features of the uterine rupture: threatened uterine rupture, uterine rupture that has happened.
- 75. Uterine rupture after C-section in the past: diagnosis, treatment, prevention.
- 76. Inversion of the uterus. Possible causes, emergency care.
- 77. Diastasis and rupture of the pelvic joints during vaginal delivery.
- 78. Postpartum septic diseases, classification, aetiology, pathogenesis.
- 79. Postpartum metroendometritis, metrophlebitis, mastitis, clinical features, diagnosis and treatment.
- 80. Postpartum peritonitis, peritonitis after caesarean section, clinical features, diagnosis, and treatment.

- 1. Menstrual dysfunction in reproductive age.
- 2. Physiological changes in the female reproductive organs in perimenopause. Pathological conditions in the perimenopausal period.
- 3. Modern methods of examination of girls and adolescents with gynaecological diseases.
- 4. Menstrual dysfunction in adolescents: classification, principles of treatment, prevention.
- 5. Inflammatory diseases of the genitals in girls and adolescents: clinical features, diagnosis and treatment
- 6. Genitourinary infections and inflammations in women, diagnosis and treatment.
- 7. Diagnosis and treatment for sexually transmitted diseases. Prevention.
- 8. Benign neoplasms of the female genitals. Diagnostics, principles of treatment, prevention.
- 9. Benign breast disorders. Modern diagnostic methods, principles of treatment and prevention.
- 10. Endometriosis. Modern aspects of aetiopathogenesis, diagnosis and treatment. Prevention.
- 11. Precancerous diseases of the vulva, vagina: diagnostic, management.
- 12. Precancerous diseases of the uterine cervix: diagnostics, management.
- 13. Precancerous diseases of the endometrium: diagnostics, management.
- 14. Malignant neoplasms of the cervix, uterus, ovaries, fallopian tubes: clinical features, diagnostics, treatment, prevention.
- 15. Modern diagnosis and emergency care for "acute abdomen" in Gynaecology.
- 16. Modern diagnosis and treatment for abnormal uterine bleeding.
- 17. Preoperative and postoperative care in Gynaecology.
- 18. Examination of married couples with infertility.
- 19. Modern methods of treatment of female infertility.
- 20. Modern methods of contraception: classification, mechanism of action, advantages, disadvantages.
- 21. Physical examination of women before initiating contraception.
- 22. Postpartum and post-abortion contraception.
- 23. Physiology of pregnancy. Management of the pregnant woman.
- 24. Perinatal protection of the foetus. Modern methods of assessment of foetal condition.
- 25. Physiology of labour.

- 26. Physiology of the postpartum period.
- 27. Methods of contraception in the postpartum period.
- 28. Gestosis of the early terms of pregnancy: clinical features, diagnosis and treatment.
- 29. Preeclampsia: clinical features, diagnosis and treatment.
- 30. Eclampsia: clinical features, diagnositics, emergency care.
- 31. Prevention of preeclampsia and rehabilitation.
- 32. Miscarriage: classification, clinical features, diagnostics, management.
- 33. Preterm labour: clinical features, diagnostics, management.
- 34. Prevention of miscarriage.
- 35. Postterm pregnancy: diagnosis, management.
- 36. Multiple pregnancy: classification, diagnosis, management.
- 37. Anomalies of the pelvic bone. Asynclitism. Contracted pelvis.
- 38. Macrosomia: clinical features, diagnostic criteria for cephalopelvic disproportion.
- 39. Pregnancy and labour in breech presentation.
- 40. Malposition. Diagnostics, management.
- 41. Obstetric bleeding during the first half of pregnancy: diagnosis and treatment.
- 42. Obstetric bleeding in labour: diagnosis and treatment.
- 43. Obstetric bleeding in the postpartum period: diagnosis and treatment.
- 44. Haemorrhagic shock in Obstetrics: clinical features, diagnosis, emergency care.
- 45. DIC syndrome: clinical features, diagnosis and treatment.
- 46. Intensive care and resuscitation for obstetric bleeding.
- 47. Anomalies of labour action: classification, clinical features, diagnosis and treatment.
- 48. Birth trauma, maternal birth trauma. Perineal laceration, cervical rupture, diagnosis and management. Uterine rupture: clinical features, diagnosis and management.
- 49. Prevention of obstetric injuries.
- 50. Extragenital pathology in pregnant women. Contraindications for pregnancy.
- 51. Acute appendicitis during pregnancy: clinical features, diagnosis and treatment.
- 52. Pregnancy and childbirth in women with HIV infection.
- 53. Postpartum septic diseases: aetiology, pathogenesis, diagnosis and treatment.
- 54. Emergency care for septic conditions in Obstetrics.
- 55. Prevention of postpartum septic diseases.
- 56. Placental dysfunction: risk factors, diagnostic criteria, management.
- 57. Fetal distress: risk factors, diagnostic criteria, management.
- 58. Fetal growth restriction: risk factors, diagnostics, management.
- 59. Immunological incompatibility of maternal and foetal blood: pathogenesis, diagnostics, management, prevention.
- 60. Anomalies in the development of the fertilized ovum: clinical features, diagnostics.

# LIST OF PRACTICAL SKILLS THAT A STUDENT SHOULD MASTER WHILE STUDYING THE DISCIPLINE "OBSTETRICS AND GYNAECOLOGY"

- 1. Speculum examination of the vagina and uterine cervix
- 2. Bacterioscopic test of the female genital tract microflora
- 3. Bacteriological test of the female genital tract microflora
- 4. Cervical screening test: Pap smear and liquid-based cytology for cervical screening
- 5. Bimanual pelvic examination
- 6. Clinical examination of the breasts
- 7. Pipelle endometrial sampling.
- 8. Pelvimetry: external variables and internal variables
- 9. Measurement of obstetric conjugate, Solovyov's index
- 10. External obstetric examination (Leopold's maneuvers)
- 11. Auscultation of the foetus
- 12. Determination of estimated date of delivery and foetal weight
- 13. Vaginal examination during pregnancy

# PRACTICAL SKILLS FOR OSCE-2 (OBSTETRICS AND GYNAECOLOGY)

- 1. Speculum examination of the vagina and uterine cervix
- 2. Bacterioscopic test of the female genital tract microflora
- 3. Bacteriological test of the female genital tract microflora
- 4. Pap smear
- 5. Bimanual pelvic examination
- 6. Clinical examination of the breasts
- 7. Pelvimetry
- 8. External obstetric examination (Leopold's maneuvers)
- 9. Auscultation of the foetus

# Speculum examination of the vagina and uterine cervix

# **Procedure steps:**

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Take the speculum Cusco in the dominant hand.
- 4. Carefully separate the labia majora using the thumb and index finger of your non-dominant hand; insert the speculum Cusco with the blades closed into the vagina.
- 5. Rotate the blades of the speculum Cusco into a horizontal position, open the blades after full insertion and maneuver the speculum gently so that the cervix comes into full view.
- 6. Note the vaginal portion of the cervix and the vagina:
  - a. colour and condition of the vaginal mucosa,
  - b. vaginal discharge,
  - c. cervical shape,
  - d. length of the cervix in cm.,
  - e. shape of the external os,
  - f. discharge from the cervix.
- 7. Gently remove the speculum Cusco.
- 8. Remove your gloves.
- 9. Wash your hands.

## Bacterioscopic test of the female genital tract microflora

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Take a microscope slide U / C / V.
- 4. Insert a cotton applicator stick (or a Volkmann's spoon) into the urethra (1.5-2 cm), remove and smear a labeled glass slide (section U).
- 5. Take the speculum Cusco in the dominant hand.
- 6. Carefully separate the labia majora using the thumb and index finger of your non-dominant hand; insert the speculum Cusco with the blades closed into the vagina.
- 7. Rotate the blades of the speculum Cusco into a horizontal position, open the blades after full insertion and maneuver the speculum gently so that the cervix comes into full view.
- 8. Note the vaginal portion of the cervix and the vagina:
  - a. colour and condition of the vaginal mucosa,
  - b. vaginal discharge,
  - c. cervical shape,
  - d. length of the cervix in cm.,
  - e. shape of the external os,
  - f. discharge from the cervix.
- 9. Collect a sample for bacterioscopic smear.
- 10. Insert the cytobrush (or the other end of a Volkmann's spoon) into the cervical canal, remove and smear a labeled glass slide (section C).

- 11. Use Ayre's wooden cervical spatula for obtain of specimen from the posterior vaginal's wall, remove and smear a labeled glass slide (section V).
- 12. Gently remove the speculum Cusco.
- 13. Remove your gloves.
- 14. Wash your hands.

# Bacteriological test of the female genital tract microflora

# **Procedure steps:**

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Take three sterile test tubes with applicators. Write the necessary data on them and mark them (urethra, cervical canal, posterior fornix).
- 4. Collect a sample for bacteriologic test. Insert the applicator into the urethra (1.5-2 cm), remove and place the applicator in a suitable sterile test tube.
- 5. Take the speculum Cusco in the dominant hand.
- 6. Carefully separate the labia majora using the thumb and index finger of your non-dominant hand; insert the speculum Cusco with the blades closed into the vagina.
- 7. Rotate the blades of the speculum Cusco into a horizontal position, open the blades after full insertion and maneuver the speculum gently so that the cervix comes into full view.
- 8. Note the vaginal portion of the cervix and the vagina:
  - a. colour and condition of the vaginal mucosa,
  - b. vaginal discharge,
  - c. cervical shape,
  - d. length of the cervix in cm.,
  - e. shape of the external os,
  - f. discharge from the cervix.
- 9. Collect a sample for bacteriologic test.
- 10. Insert the applicator into the cervical canal, remove and place the applicator in a suitable sterile test tube.
- 11. Use the applicator for obtain of specimen from the posterior fornix. Place the applicator in a suitable sterile test tube.
- 12. Gently remove the speculum Cusco.
- 13. Remove your gloves.
- 14. Wash your hands.

# Pap smear

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Take the speculum Cusco in the dominant hand.
- 4. Carefully separate the labia majora using the thumb and index finger of your non-dominant hand; insert the speculum Cusco with the blades closed into the vagina.
- 5. Rotate the blades of the speculum Cusco into a horizontal position, open the blades after full insertion and maneuver the speculum gently so that the cervix comes into full view.
- 6. Note the vaginal portion of the cervix and the vagina:
  - a. colour and condition of the vaginal mucosa,
  - b. vaginal discharge,
  - c. cervical shape,
  - d. length of the cervix in cm.,
  - e. shape of the external os,
  - f. discharge from the cervix.
- 7. Remove superficial mucous/exudate using a cotton swab.
- 8. Take a microscope slide ectocervix / endocervix.
- 9. Collect a sample for cytologic smear.

- 10. Use a curved cytobrush or place the longer end of Ayre's wooden cervical spatula into the os of the cervix and press gently, rotate 360°, remove and smear a labeled glass slide (section ectocervix).
- 11. Introduce the cytobrush into the cervical canal, rotate 360° 2 times in clockwise direction, remove and smear a labeled glass slide (section endocervix).
- 12. Gently remove the speculum Cusco.
- 13. Remove your gloves.
- 14. Wash your hands.

# **Bimanual pelvic examination**

# **Procedure steps:**

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Carefully separate the labia majora using the thumb and index finger of your non-dominant hand.
- 4. Gently introduce the middle finger of your dominant hand, then the index finger into the vagina; the thumb should be abducted and the ring and little fingers flexed into the palm.
- 5. Note the length and width of the vagina, vaginal elasticity, tenderness, rule out during palpation neoplasms and congenital abnormalities such as a vaginal septum, a vaginal stenosis, etc.
- 6. Note the length of the vaginal part of the cervix (cm).
- 7. Note the consistency of the cervix (dense, soft), cervical dilation, gently move the cervix from side to side to check for cervical tenderness.
- 8. Place your other hand midway between the umbilicus and the symphysis pubis and press downward to pelvic hand.
- 9. Feel the uterus and note: position of the uterus (anteflexio, retroflexio), size of the uterus (normal, reduced, enlarged), consistency (tight-elastic, soft), mobility (relatively mobile, limited mobility), tenderness.
- 10. Gently slide the vaginal fingers into the right lateral vaginal fornix; note the size, mobility and tenderness of the right adnexa.
- 11. Gently slide the vaginal fingers into the left lateral vaginal fornix; note the size, mobility and tenderness of the left adnexa.
- 12. Note the vaginal fornices.
- 13. Remove your gloves.
- 14. Wash your hands.

### Clinical examination of the breasts

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Inspect the mammary glands: contour changes, skin changes, nipple changes, areas around nipples (asymmetry, retraction, etc.).
- 4. Ask the patient to place her hands on the back of her head in a standing position.
- 5. Palpate the right and left mammary gland sequentially, using the tips of the index, middle and ring fingers of the "dominant" hand. Keep the mammary gland with the other hand. First, conduct superficial, then deep palpation of the mammary gland.
- 6. Follow systematically, in a circular pattern (simulate a clock) feel the entire breast, note consistency of tissue, any tenderness, presence/absence of tumours. Begin by palpating the upper-outer quadrant of the breast and continue clockwise (upper outer, upper inner, lower inner and lower outer).
- 7. In case of breast tumour, detect its shape, location, size, consistency, sensitivity, mobility, correlation with the breast tissue.
- 8. Palpate the lymph nodes: supraclavicular, subclavicular and axillary.

- 9. Carefully squeeze the edges of the areola between the index finger and thumb, evaluate the nipple discharge (absent, serous, with blood impurities, milky, etc.).
- 10. Remove your gloves.
- 11. Wash your hands.

# **Pelvimetry**

## **Procedure steps:**

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Take a pelvimeter.
- 4. Place the buttons of the pelvimeter on the anterio-superior spines of iliac bones (normally D. spinarum equals 25-26 cm).
- 5. Move the buttons of the pelvimeter on the most distant locations of iliac cristae (normally D. cristarum equals 28-29 cm).
- 6. Place the buttons of pelvimeter on trochanteria major of femoral bones (normally D. trochanterica equals 30-31 cm).
- 7. Place the patient on her left side, bent her left leg in knee joint; measure the distance between the upper border of the pubic symphysis and the fossa supra-sacralis (normally C. externa equals 20-21 cm).
- 8. Remove your gloves and put on a new pair of latex gloves.
- 9. During vaginal examination measure the distance from the lower margin of the pubic symphysis to the sacral promontory (normally C. diagonalis equals 12.5-13 cm).
- 10. Remove your gloves.
- 11. Wash your hands.

### External obstetric examination (Leopold's maneuvers)

# **Procedure steps:**

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Place ribs of your both hands on the uterine fundus; note the height of the uterus and detect the part of the foetus, which locates in fundus.
- 4. Place palms of your both hands on the left and right side of the uterus.
- 5. Using palpation of the uterine lateral wall find the foetal back.
- 6. Note the foetal lie and foetal position.
- 7. Place your hand over the upper border of the pubic symphysis and palpate the presenting part of the foetus.
- 8. Note the foetal presentation.
- 9. Turn your back to the patient, place your palms on the front-side walls of the uterus.
- 10. Move fingers of both hands gently down the sides of the uterus toward the pubis.
- 11. Note the foetal engagement.
- 12. Give the full answer about the foetal orientation: foetal lie, presentation and foetal position.
- 13. Remove your gloves.
- 14. Wash your hands.

#### **Auscultation of the foetus**

- 1. Wash your hands.
- 2. Put on latex gloves.
- 3. Determine the foetal orientation (foetal lie longitudinal, transverse, oblique; fetal presentation cephalic, breech; foetal position left, right, anterior, posterior) using the 2nd and the 3rd Leopold's maneuvers.
- 4. Take the obstetric stethoscope in the dominant hand.
- 5. Determine and describe the location of the point for auscultation (the best place for auscultation depends on foetal orientation; in case of cephalic presentation below the navel,

pelvic presentation - at the level or slightly above the navel, in case of right position - on the right side of the abdomen, left position - on the left side of the abdomen, in case of anterior position - closer to the linea nigra, posterior position - closer to the lateral parts of the abdomen).

- 6. Remove your gloves.
- 7. Wash your hands.

#### 12. LIST OF RECOMMENDED LITERATURE

#### **Basic:**

- 1. Obstetrics: student's book / Акушерство: підручник / Gladchuk I.Z., Ancheva I.A. Vinnytsia: Nova Knyga, 2021. –288 р.
- 2. Obstetrics and Gynecology: in 2 vol.:textbook. Volume 2. Gynecology / V.I. Gryshchenko, M.O. Shcherbina, B.M. Ventskivskyi et al.; edited by V.I. Gryshchenko, M.O. Shcherbina. 3th edition. K.: AUS Medicine Publishing, 2022 352 p.
- 3. Obstetrics and Gynecology: in 2 vol.:textbook. Volume 1. Obstetrics / V.I. Gryshchenko, M.O. Shcherbina, B.M. Ventskivskyi et al.; edited by V.I. Gryshchenko, M.O. Shcherbina. 2th edition. K.: AUS Medicine Publishing, 2018 392 p.
- 4. Oats, Jeremy Fundamentals of Obstetrics and Gynaecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynaecology / J. Oats, S. Abraham. 10<sup>th</sup> ed. Edinburgh [etc.]: Elsevier, 2017. VII, 375 p.
- 5. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. 384 pp.
- 6. The FIGO Textbook of Pregnancy Hypertension. An evidence-based guide to monitoring, prevention and management. L. A. Magee, P. Dadelszen, W. Stones, M. Mathai (Eds), The Global Library of Women's Medicine. 2016. 456 pp.
- 7. Dutta, Durlav Chandra. D. C. Dutta's Textbook of Gynecology including Contraception / D.C. Dutta; ed/ Hiralal Konar. 7<sup>th</sup>.ed. New Delhi: Jaypee Brothers Medical Publishers, 2016. XX, 574 p.

# **Additionally:**

- 1. The FIGO Textbook of Pregnancy Hypertension. An evidence-based guide to monitoring, prevention and management. L. A. Magee, P. Dadelszen, W. Stones, M. Mathai (Eds), The Global Library of Women's Medicine. 2016. 456 pp.
- 2. Obstetrics: Normal and Problem Pregnancies, 7th Edition S. Gabbe, J. R. Niebyl, J. L. Simpson, M. B. Landon, H. L. Galan, E. R. M. Jauniaux, D. A. Driscoll, V. Berghella and W. A. Grobman, Elsevier. 2017. 1320 pp.
- 3. Modern technical teaching aids (see appendix to the work program of the 4th year)
- 4. Prevention of purulent-septic complications during laparoscopic surgeries on pelvic organs with the risk of vaginal microbiota contamination / Zaporozhan VN, Gladchuk IZ, Rozhkovska NM, Volyanska AG, Shevchenko OI //World of Medicine and Biology. 2020-№1(71). P.49-53. (Web of science)
- 5. Normative documents of the Ministry of Health of Ukraine on obstetrics and gynecology:
- Order No. 676 of 12/31/2004 "On approval of clinical protocols for obstetric and gynecological care"
- Order No. 782 dated 12.29.2005 "On the approval of clinical protocols for obstetric and gynecological care" (as amended in accordance with the orders of the Ministry of Health)
- Order No. 900 of 12/27/2006 Clinical protocol on obstetric care. "Fetal distress during pregnancy and childbirth."
- Order No. 901 dated 27.12.2006 Clinical protocol on obstetric care. "Transferred pregnancy".
- Order No. 906 of 12/27/2006 Clinical protocol on obstetric care. Perinatal infections.
- Order No. 540 dated 04.08.2006 On approval of the principles of breastfeeding support, criteria and procedure for evaluating a health care facility for compliance with the status "Child-

friendly Hospital".

- Order No. 716 dated 14.11.2007 "On the approval of the clinical protocol for obstetric care "Prevention of transmission of HIV from mother to child".
- Order No. 502 dated August 29, 2008, "On approval of the clinical protocol for antibacterial prophylaxis in surgery, traumatology, obstetrics and gynecology"
- Order No. 624 03.11.2008 Clinical protocol for obstetric care "Normal childbirth".
- Order No. 417 dated 15.07.2011 "On the organization of ambulatory obstetric and gynecological care in Ukraine"
- Order No. 976 of 12/27/2011 Vaginal delivery after caesarean section (C-section)
- Order No. 977 of 12/27/2011 Clinical protocol for obstetric care "Caesarean section".
- Order No. 423 dated 05/24/2013 "On approval of the procedure for providing complex medical care to a pregnant woman during an unwanted pregnancy, forms of primary accounting documentation and instructions for filling them out"
- Order No. 955 dated 05.11.2013 "Procedure carrying out emergency post-contact prevention of HIV infection among employees in the performance of professional duties".
- Order No. 59 dated 21.01.2014 On the approval and implementation of medical and technological documents on the standardization of medical care for family planning.
- Order No. 205 dated 03.24.14. Clinical protocol "Obstetric bleeding".
- Order No. 236 dated 02.04.2014 "Papproval and implementation of medical and technological documents on the standardization of medical care for dysplasia and cervical cancer".
- Order No. 319 dated 06.04.2016 "On the approval and implementation of medical and technological documents on the standardization of medical care for genital endometriosis"
- Order No. 353 dated 04/13/2016 "On the approval and implementation of medical and technological documents on the standardization of medical care for abnormal uterine bleeding"
- Order No. 869 dated 05.05.2021 "On approval of the unified clinical protocol of primary, secondary (specialized), tertiary (highly specialized) medical care "Endometrial hyperplasia"

## 13. ELECTRONIC INFORMATION RESOURCES

- 1. https://www.cochrane.org/- Cochrane / Cochrane Library
- 2. <a href="https://www.acog.org/">https://www.acog.org/</a>- The American College of Obstetricians and Gynecologists
- 3. <a href="https://www.uptodate.com">https://www.uptodate.com</a> UpToDate
- 4. https://online.lexi.com/- Wolters Kluwer Health
- 5. <a href="https://www.ncbi.nlm.nih.gov/">https://www.ncbi.nlm.nih.gov/</a>- National Center for Biotechnology Information / National Center for Biotechnology Information
- 6. <a href="https://pubmed.ncbi.nlm.nih.gov/">https://pubmed.ncbi.nlm.nih.gov/</a>- International Medical Library / National Library of Medicine
- 7. https://www.thelancet.com/- The Lancet
- 8. https://www.rcog.org.uk/- Royal College of Obstetricians & Gynecologists
- 9. https://www.npwh.org/- Nurse practitioners in women's health
- 10. <a href="http://moz.gov.ua-Ministry of Health of Ukraine">http://moz.gov.ua-Ministry of Health of Ukraine</a>
- 11. <u>www.ama-assn.org</u>– American Medical Association / <u>American Medical Association</u>
- 12. www.who.int- World Health Organization
- 13. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
- 14. http://bma.org.uk- British Medical Association
- 15. <u>www.gmc-uk.org</u>- General Medical Council (GMC)
- 16. <u>www.bundesaerztekammer.de</u>– German Medical Association
- 17. www.euro.who.int- European Regional Office of the World Health Organization